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APPLICATION NO. ATTORNEY DOCKET NO. FILING DATE FIRST NAMED INVENTOR 09/114,844 07/14/98 **ASHKENAZI** 1129R1 **EXAMINER** HM12/1005 DIANE L. MARSCHANG, MERCHANT, GOULD, KAUFMAN, C SMITH, EDELL, WELTER, & SCHMIDT, P.A. ART UNIT PAPER NUMBER 3100 NORWEST CENTER 90 SOUTH SEVENTH STREET 1646 MINNEAPOLIS MN 55402-4131 DATE MAILED: 10/05/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

| | Application No. | Applicant(s) |
|--|---|---|
| Office Action Summary | 09/114,844 | ASHKENAZI ET AL. |
| | Examiner | Art Unit |
| | Claire M. Kaufman | 1646 |
| The MAII ING DATE of this communication ann | | |
| The MAILING DATE of this communication app ars on the cover sheet with the correspondence address Period for Reply | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE $\underline{1}$ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | |
| Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communic. If the period for reply specified above is less than thirty (30) days be considered timely. If NO period for reply is specified above, the maximum statutory communication. Failure to reply within the set or extended period for reply will, by Status | cation. s, a reply within the statutory minimum of period will apply and will expire SIX (6) N | thirty (30) days will |
| 1) Responsive to communication(s) filed on <u>01 J</u> | uly 1998 . | |
| | s action is non-final. | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | |
| Disposition of Claims | , | |
| 4)⊠ Claim(s) <u>1-37</u> is/are pending in the application. | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | |
| 5) Claim(s) is/are allowed. | | |
| 6) Claim(s) is/are rejected. | | |
| 7) Claim(s) is/are rejected. | | |
| | action requirement | |
| 8) Claims 1-37 are subject to restriction and/or election requirement. | | |
| Application Papers | | |
| 9) ☐ The specification is objected to by the Examine | r. | |
| 10) ☐ The drawing(s) filed on is/are objected to by the Examiner. | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved. | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | |
| Priority under 35 U.S.C. § 119 | | |
| <u> </u> | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been: | | |
| a) ☐ All b) ☐ Some "c) ☐ None of the CERTIFI 1. ☐ received. | ED copies of the phonty docume | nts nave been: |
| 2. received in Application No. (Series Code | / Serial Number) | |
| 3. received in this National Stage application | n from the International Bureau (I | PCT Rule 17.2(a)). |
| * See the attached detailed Office action for a list of | of the certified copies not received | i. |
| 14) Acknowledgement is made of a claim for domes | stic priority under 35 U.S.C. & 11 | 9(e). |
| Attachment(s) | , | |
| 14) Notice of References Cited (PTO-892) 15) Notice of Draftsperson's Patent Drawing Review (PTO-948) 16) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 18) Notice of Informal I | y (PTO-413) Paper No(s) Patent Application (PTO-152) |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1646.

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Paula Hutzell, Supervisory Patent Examiner at Paula.Hutzell@uspto.gov or 703-308-4310. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, 29, 34 and 35 drawn to RTD polypeptide, chimeric polypeptide, and article of manufacture comprising the polypeptide, classified in class 530, subclass 350.
- II. Claims 15-19, 34 and 35, drawn to antibody and article of manufacture comprising the antibody, classified in class 530, subclass 387.1.
- III. Claims 20-28, drawn to nucleic acid, vector, host cell and process of producing the encoded polypeptide, classified in class 435, subclass 69.1.
- IV. Claims 30-31, drawn to transgenic animal, classified in class 800, subclass 2.
- V. Claims 32-33, drawn to knockout animal, classified in class 800, subclass 2.

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VI. Claims 36-37, drawn to method of modulating apoptosis, classified in class 514, subclass 12.

The inventions are distinct, each from the other because of the following reasons:

The polypeptides of Group I are related to the antibodies of Group II by virtue of being the cognate antigen, necessary for the production of the antibodies. Although the polypeptide and antibody are related due to the necessary stearic complementarity of the two, they are distinct inventions because they are structurally and functionally different, and the polypeptide can be used for another and materially different process other than for production of the antibody, such as to assay or purify the natural ligand of the polypeptide, or in assays for the identification of agonists or antagonists of the polypeptide.

The nucleic acid of Invention III is related to the polypeptide of Invention I by virtue of encoding the same. The nucleic acid has utility for the recombinant production of the protein in a host cell, as recited in claim 28. Although the nucleic acid and polypeptide are related since the nucleic acid encodes the specifically claimed polypeptide, they are distinct inventions because the polypeptide product can be made by another and materially different process, such as by synthesis or purification from the natural source. Further, the nucleic acid may be used for processes other than the production of the polypeptide, such as nucleic acid hybridization assay for detection of tissue specific mRNA presence or to identify related nucleic acids.

The polypeptide of Group I and polynucleotide of Group III, which are themselves distinct, are related to the transgenic and knockout animals of Groups IV-V in that the animals express the polypeptide or have an altered gene encoding the polypeptide and because those animals express the nucleic acid or comprise an altered nucleic acid. Nevertheless, the inventions are distinct because the nucleic acid can be used for a materially different purpose such as for the *in vitro* production of the protein or for identification of related nucleic acids by hybridization screening. The inventions are further distinct because the polypeptide can be expressed by other means, for example by transfection of an *in vitro* host cell with the encoding nucleic acid. Also the polypeptide can be used for another and materially different process such

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as in the production of an antibody or affinity purification of the natural ligand of the polypeptide.

Inventions I and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polypeptide of Invention I can be used in a materially different process such as in the production of an antibody or affinity purification of the natural ligand of the polypeptide.

The nucleic acid of Group III is related to the antibody of Group II by virtue of encoding the polypeptide which is the cognate antigen of the antibody. However, the nucleic acid is distinct from the antibody for the reasons that the polypeptide and antibody are distinct inventions. Additionally, the nucleic acid can be used for a process other than production of the polypeptide/antigen, such as nucleic acid hybridization assay, and is structurally and functionally different from the antibody.

The antibody of Invention II is unrelated to the transgenic or knockout animal of Inventions IV-V, which are themselves distinct, as well as to the method of Invention VI. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the antibody is structurally and functionally different than either animal and cannot be used in or produced by the method of Invention VI. The transgenic animal of Invention IV is related to the knockout animal of Invention V in that the transgenic expresses a non-altered or fully functional nucleic acid encoding the RTD polypeptide, while the knockout animal has an altered gene and, in accordance with the art-accepted meaning of knockout, would not express a fully functional RTD polypeptide. These animals have different functions and comprise different Apo-related nucleic acids. Therefore, the animals of Inventions IV and V are distinct.

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The nucleic acid of Invention III is related to Invention VI by encoding the polypeptide which can be used in the process. However, the inventions are distinct because the nucleic acid can be used for a process other than production of the polypeptide, such as nucleic acid hybridization assay, and cannot directly be used in the claimed method.

The method of Invention VI is unrelated to the transgenic or knockout animal of Inventions IV-V. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the animals cannot be used in or produced by the method of Invention VI.

Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification and because of their recognized divergent subject matter, and the search required for each Invention is not coextensive with another, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Claire M. Kaufman, whose telephone number is (703) 305-5791. Dr. Kaufman can generally be reached Monday through Friday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached at (703) 308-4310.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Official papers filed by fax should be directed to (703) 308-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294. NOTE: If applicant *does* submit a paper by fax, the original signed copy should be retained by the applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office. **Please** advise the examiner at the telephone number above before facsimile transmission.

Claire M. Kaufman, Ph.D.

Patent Examiner, Art Unit 1646

September 30, 1999



RESTRICTION ELECTION FACSIMILE TRANSMISSION

| DATE: |
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| FROM/ATTORNEY: |
| FIRM: |
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| PHONE NUMBER: |
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| TO EXAMINER: C. Kaufman |
| ART UNIT: 1646 |
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